

## GENERAL SEWER & DRAINAGE NOTES

Unless otherwise specified:

1. Pipe less than 12" diameter shall be concrete per astm c14 class 3.
2. Pipe 12" and 15" diameter shall be concrete per astm c76 class iv.
3. Pipe 18" diameter and larger shall be concrete per astm c76 class iii.
4. Ductile iron pipe shall be per ansi a21.51 class 50 with push-on joints. Fittings for ductile iron pipe shall be ductile per ansi a21.10 or ansi a21.53 with push-on joints. Glands on mechanical joint pipe and fittings shall be ductile.
5. Pvc pipe and fittings shall be per astm d3034, sdr35 with rubber gasket joints. Pvc pipe for pss and psd shall be tested for excessive deflection with a mandrel per section 7-17.3(4) of the specifications.
6. Subsurface drain (ssd) pipe and fittings shall be pvc per astm d2241 sdr21 (class 200) with rubber gasket joints. Pipe shall have slotted perforations. Slots are to be 0.040" wide 1.0" long and spaced 0.25" apart. Slot locations shall be located per detail on plan.
7. Corrugated metal pipe shall be aluminum per aashto m196 type i. 6" diameter pipe shall be 0.060" thick with 1-1/2" x 1/4" corrugations. \_\_\_\_" diameter pipe shall be \_\_\_\_" thick with 2-2/3" x 1/2" corrugations. \_\_\_\_" diameter pipe shall be \_\_\_\_" thick with 3" x 1" corrugations.
8. Bedding shall be class b for all pipe except ductile iron pipe, which shall be class d. Bedding material for pvc pipe and cmp shall be mineral aggregate type 22. Bedding material for pvc pipe and cmp shall be mechanically compacted to 95% of maximum dry density as measured by astm d-698.
9. Tees on new pipe less than 24" diameter shall be prefabricated. Tees on existing pipe or on new pipe without prefabricated tees shall be connected by core drilling and flexible connection. See specifications.
10. Catch basin connections, inlet connections, and service drains shall be 8" diameter pipe.
11. Tees, catch basin connections, side sewers, and service drains shall be placed at a minimum slope of 2% and a maximum slope of 50%. Inlet connections shall be placed at a minimum slope of 5% and a maximum slope of 50%.
12. Reconnection of existing catch basins shall include new traps, connection to storm drains, and removal of existing traps.

13. Service drains and side sewers shall be connected or reconnected as approved by the inspector.
14. Relay existing service drains and side sewers to clear over or under the new utility as approved by the inspector.
15. Where a new pipe clears an existing or new utility by 6" or less, polyethylene plastic foam shall be placed as a cushion between the utilities.
16. Service drains and side sewers shall not be backfilled until the pipe has been inspected and approved and the location and depth is recorded by the inspector.
17. Pipe 12" diameter and larger to be abandoned shall be filled with portland cement and sand mixture. See specifications.
18. Soils test boring locations are indicated on the plans. Test data is included in the specifications.
19. The contractor shall provide supports for power poles near excavations per Seattle City Light standards no. D3-6.